Evaluation (Enter number from 4, 3, 2, 1) :\_\_\_\_\_\_\_\_\_

**Meets ASE Task:** (A1-B-1) P-1 Identify cylinder head and valve train components and configurations.

**Cylinder Head Specifications**

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_

Time on Task:\_\_\_\_\_\_\_\_\_\_\_\_\_

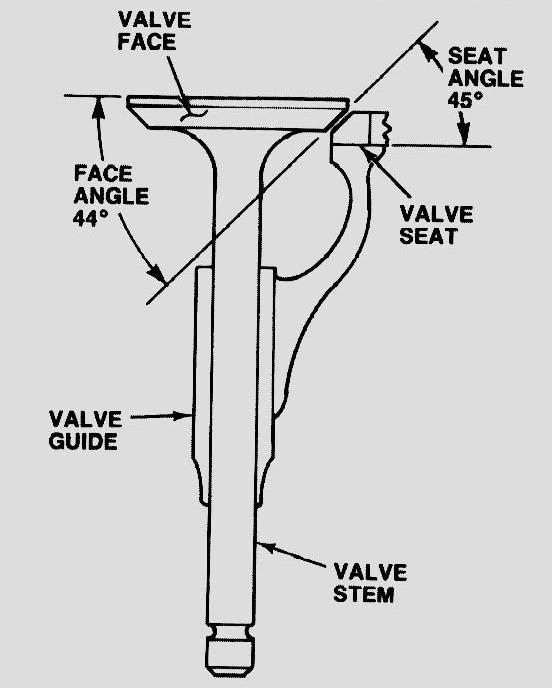
Make/Model/Year:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

VIN:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Page 84

**1.** Type of material: cast iron or aluminum alloy

**2.** What is the maximum allowable surface variation (out-of-flat)? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **3.** Valve seat runout (maximum): \_\_\_\_\_\_\_\_\_\_\_

**4.** Intake valve seat angle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5.** Intake valve face angle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**6.** Intake valve seat width: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**7.** Exhaust valve seat angle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**8.** Exhaust valve face angle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**9.** Exhaust valve seat width: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**10.** Type of valve guide:

integral (cast iron heads only)

powdered metal

other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**11.** Valve guide bore diameter: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**12.** Minimum valve margins: intake valve \_\_\_\_\_\_\_\_\_\_ exhaust valve \_\_\_\_\_\_\_\_\_\_

**13.** Type of valve rotators:

positive on exhaust valve only

free type (keepers touching together)

not used on this engine

**14.** Location of valve rotators:

above the valve spring

under the valve spring

not used on this engine